

Henry Cheng
Serial No.: 09/643,981
Response to Office Action dated October 5, 2004

Remarks

Reconsideration and allowance of the subject patent application are respectfully requested.

The specification has been amended to correct minor informalities and to update the references to the related application referenced on pages 1 and 16. Entry of these amendments is respectfully requested.

Claims 1, 2, 4-6, 8-13, 23, 24 and 26-29 were rejected under 35 U.S.C. Section 102(b) as allegedly being "anticipated" by Williams (U.S. Patent No. 5,896,459). As explained below, Williams does not disclose the subject matter of the rejected claims and thus Applicant traverses this rejection.

Independent claim 1 is directed to a mixer that includes a mixer buffer for storing sample values for three or more sound channels, each sound channel including a main sound component and one or more auxiliary sound components. Send paths send the auxiliary sound components for each sound channel to a sound effects processor, and return paths from the sound effects processor respectively add the effects-processed auxiliary sound components for each channel to the corresponding main sound component. Independent system claim 5 and independent method claim 23 each contains similar recitations.

Williams discloses an audio mixer 100 that provides a "dry" mix output 104, an effects return mix output 106, and a main mix output 108. The dry mix output 104 represents the sum or mix of individual input audio signals. The effects returns output 106 provides select or various combinations of select audio signals that have been processed by a special effects processor. The main mix output 108 provides a main audio mix representing the mix of the dry audio mix and the effects returns audio mix.

Williams fails to disclose, among other things, sound channels each of which includes a main sound component and one or more auxiliary sound components. Williams generally discloses input channels (e.g., channels 12 in Figure 1 and channels 102 in Figure 3), but Applicant finds no disclosure in Williams that these channels have a main sound component and one or more auxiliary sound components as

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claimed. For this reason alone, Williams cannot anticipate the subject matter of the rejected claims. *See, e.g., Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.")

Williams further fails to disclose sending the auxiliary sound components of each of a plurality of sound channels to a sound effects processor and then adding these effects-processed auxiliary sound components to corresponding main sound components. Williams discloses sends buses for sending signals for effects processing and an effects return for the effects-processed signals. However, as is clear from Figure 4 of Williams, each of the respective sends buses 154-160 is a mix of the audio signals of all the input channels 102 and the effects return bus has one portion onto which the left channels of all the return signals are mixed and another portion onto which the right channels of all the return signals are mixed. There is simply no provision in Williams for adding effects-processed auxiliary sound components for each of a plurality of sound channels to main sound components for these respective channels. For this additional and independent reason, Williams does not anticipate the subject matter of the rejected claims.

In connection with the claimed auxiliary sound components, the office action references auxiliary inputs 208 and 210 shown in Figure 4 of Williams. However, these signals are "[a]dditional signals from external equipment, such as another mixing console" that may be mixed with the level adjusted main audio mix. *See Williams*, col. 6, lines 57 *et seq.* Among other things, there is no disclosure in Williams of these additional signals having any effects processing, much less of these signals being added to the main sound component of a channel of which they are auxiliary sounds components. As such, these additional signals cannot constitute the claimed auxiliary sound components.

For at least these reasons, Applicant respectfully submits that Williams does not anticipate claims 1, 2, 4-6, 8-13, 23, 24 and 26-29.

Claims 3, 7 and 25 were rejected under 35 U.S.C. Section 103(a) as allegedly being "obvious" over Williams in view the admitted prior art of Figure 11b. While not acquiescing in this rejection, Applicant notes that Figure 11b does not remedy the above-

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noted deficiencies of claims 1, 5 and 23, from which claims 3, 7 and 25 respectively depend. As such, even if sufficient motivation could be identified for the modification to Williams proposed in the office action, the subject matter of claims 3, 7 and 25 would not result.

Claims 14, 15 and 17-22 were rejected under 35 U.S.C. Section 103(a) as allegedly being "obvious" over Kaneoka (U.S. Patent No. 4,783,812) in view of Williams. Kaneoka is applied for its disclosure of a gaming system, but is admitted to lack a sound effects processor and a mixer as specified in claim 14. *See* Office Action, page 6. Williams is alleged to remedy this deficiency. However, as explained above, Williams does not disclose a mixer that includes a mixer buffer for storing sample values for three or more sound channels, each sound channel including a main sound component and one or more auxiliary sound components; send paths for sending the auxiliary sound components for each sound channel to the sound effects processor; and return paths from the sound effects processor for respectively adding the effects-processed auxiliary sound components for each channel to the corresponding main sound component. As such, even assuming for the sake of argument that sufficient motivation could be demonstrated to modify Kaneoka as proposed, the result would not be the subject matter of claims 14, 15 and 17-22.


Claim 16 was rejected under 35 U.S.C. Section 103(a) as allegedly being "obvious" over the proposed Kaneoka-Williams combination, in further view of the admitted prior art of Figure 11b. Here again, while not acquiescing in this rejection, Applicant notes that Figure 11b does not remedy the above-noted deficiencies of claims 1, 5 and 23, from which claims 3, 7 and 25 respectively depend. As such, even if sufficient motivation could be identified for the modification to Williams proposed in the office action, the subject matter of claims 3, 7 and 25 would not result.

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Applicant submits that the pending claims are in condition for allowance, and action to that end is earnestly solicited.

Respectfully submitted,

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